

REMARKS

Reconsideration and allowance of the present patent application based on the foregoing amendments and following remarks are respectfully requested. Since this Amendment is being presented together with a Request for Continued Examination, entry of this Amendment is respectfully requested.

By this Amendment, claims 1, 3, 5, 7-11, 13, 15 and 17-20 are amended and claims 2, 4, 12 and 14 are cancelled without prejudice or disclaimer to the subject matter therein. Claim 1 is amended to positively recite the features of claims 2 and 4. Claim 11 is amended to positively recite the features of claims 12 and 14. Claims 3 and 13 are rewritten in independent form. No new matter is added. Accordingly, after entry of this Amendment, claims 1-3, 5-11, 13 and 15-20 will remain pending in the patent application.

Claims 1-20 were rejected under 35 U.S.C. §103(a) based on Isobe *et al.* (U.S. Pat. No. 6,019,285) (hereinafter "Isobe") in view of Harrell (U.S. Pat. No. 6,609,655). The rejection is respectfully traversed.

As conceded by the Examiner at page 3, first paragraph, of the Office Action, Isobe does not disclose, teach or suggest using a second processor when an error is generated by the first processor. However, Applicant respectfully submits that there are additional features that are absent in Isobe.

For example, Isobe does not disclose, teach or suggest a card processing system using an IC card having an electrical contact and an IC card antenna, the IC card capable of exchanging information through the electrical contact with an on-board unit installed in a vehicle using a toll road, and capable of wireless communication with an antenna unit installed at a roadside of the toll road through the IC card antenna, the card processing system comprising, *inter alia*, comparison/collation means for comparing and collating the peculiar information that are stored in the on-board unit and the IC card, respectively, when the IC card storing entrance information of the toll road by the second processor is inserted in the on-board unit; and means for storing the entrance information stored in the IC card in the on-board unit when peculiar information stored in the on-board unit and the IC card unit are matched to each other by the comparison/collation means, as recited in claim 1 and its dependent claims.

Similarly, Isobe does not disclose, teach or suggest a card processing method using an IC card having an electrical contact and an IC card antenna, the IC card capable of exchanging information through the electrical contact with an on-board unit installed in a

vehicle using a toll road, and capable of wireless communication with an antenna unit installed at a roadside of the toll road through the IC card antenna, the method comprising, *inter alia*, comparing and collating peculiar information stored in the on-board unit and the IC card, respectively, when the IC card storing entrance information of the toll road is inserted into the on-board unit in the second executing step; and storing the entrance information stored in the IC card in the on-board unit when the on-board unit's peculiar information are matched to each other in the comparing and collating step, as recited in claim 11 and its dependent claims.

Isobe discloses an automatic toll charging system that communicates by radio between roadside units disposed on each gate of a toll road and a vehicle-mounted unit mounted in a vehicle. (See col. 2, lines 50-67). Isobe also discloses that an IC card is inserted in the vehicle-mounted unit, and that communication between the vehicle-mounted unit and the roadside units is done via the radio communication part 12 arranged in the vehicle-mounted unit. (See col. 4, lines 3-16).

However, unlike claims 1 and 5, Isobe is silent as to comparing and collating the peculiar information that are stored in the on-board unit and the IC card, respectively, when the IC card storing entrance information of the toll road by the second processor is inserted in the on-board unit. Isobe merely discloses that the IC card 20 includes an interface 21 for exchanging information. (See col. 4, lines 37-42). However, contrary to what is stated in the Office Action, Isobe fails to disclose, teach or suggest a means for comparing and collating peculiar information that are stored in the on-board unit and the IC card. Specifically, in contrast to claims 1 and 5, Isobe merely discloses reading out the payment information recorded in the information recording part 22 of the IC card 20 and temporarily recording them in the information recording part 13 through the interface part 21. (See col. 4, lines 37-42 and col. 5, lines 42-46). In other words, Isobe merely discloses exchanging information, but is silent as to comparing and collating information stored in the on-board unit and the IC card.

Furthermore, unlike claims 1 and 5, Isobe is silent as to storing the entrance information stored in the IC card in the on-board unit when peculiar information stored in the on-board unit and the IC card unit are matched to each other by the comparison/collation means. Specifically, contrary to what is stated in the Office Action, Isobe does not disclose these features at col. 5, lines 1-20. Isobe merely discloses at col. 5, lines 1-20 that the roadside unit compares the vehicle type information from the vehicle type detection apparatus with other vehicle type information included in the vehicle information received from the

passing vehicle and that the roadside unit is electrically connected to a host computer disposed in a central unit. However, Harrell is simply silent as to what happens to entrance information stored in the IC card when information stored in the on-board unit and the IC card unit are matched to each other.

Harrell fails to remedy the deficiencies of Isobe. Harrell merely discloses a smart card system that includes a smart card payment processing facility for communicating with the smart card for automated payments of fares and/or fees and/or tolls. (*See* col. 2, lines 15-65). Harrell is, however, silent as to comparing and collating the peculiar information that are stored in the on-board unit and the IC card or storing the entrance information stored in the IC card in the on-board unit when peculiar information stored in the on-board unit and the IC card unit are matched to each other by the comparison/collation means.

Accordingly, any reasonable combination of Isobe and Harrell cannot result, in any way, in the invention of claims 1 and 11.

Claims 5, 7, 9 and 10 are patentable over Isobe, Harrell and a combination thereof at least by virtue of their dependency from claim 1, and for the additional features recited therein.

Similarly, claims 15, 17, 19 and 20 are patentable over Isobe, Harrell and a combination thereof at least by virtue of their dependency from claim 11, and for the additional features recited therein.

Claim 3 recites a card processing system using an IC card having an electrical contact and an IC card antenna, the IC card capable of exchanging information through the electrical contact with an on-board unit installed in a vehicle using a toll road, and capable of wireless communication with an antenna unit installed at a roadside of the toll road through the IC card antenna, the card processing system comprising: a first processor configured to execute, at an exit of the toll road, an electronic toll collection process through the wireless communication between the antenna unit installed at the roadside and the on-board unit into which the IC card is inserted to electrically connect the electrical contact of the IC card with the on-board unit; and a second processor configured to execute at the exit of the toll road a non-contact IC card process through the wireless communication between the antenna unit installed at the roadside and the IC card through the IC card antenna when an error is generated in the electronic toll collection process by the first processor.

As conceded by the Examiner, Isobe does not disclose, teach or suggest using a second processor when an error is generated by the first processor. The Examiner then relied on Harrell as allegedly teaching such a second processor. Applicant respectfully disagrees.

Harrell merely discloses a smart card capable of wirelessly communicating with a toll system. Harrell is however silent as to a system including a second processor that is used when an error is generated by a first processor. Harrell only discusses wireless communication between a card and a toll system but is not concerned with providing wireless communication between a smart card and a second processor when an error is generated during the use of the first processor. As such, any reasonable combination of Isobe and Harrell cannot result, in any way, in the invention of claim 3.

Claim 13 is patentable for at least similar reasons as provided in claim 3, and for the additional features recited therein.

Claims 6 and 8 are patentable over Isobe, Harrell and a combination thereof at least by virtue of their dependency from claim 3 and for the additional features recited therein.

Claims 16 and 18 are patentable over Isobe, Harrell and a combination thereof at least by virtue of their dependency from claim 3 and for the additional features recited therein.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 3, 5-11, 13 and 15-20 under 35 U.S.C. §103(a) based on Isobe and Harrell are respectfully requested.

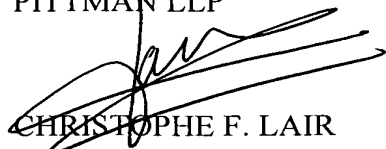
The rejections having been addressed, Applicant respectfully submits that the application is in condition for allowance, and a notice to that effect is earnestly solicited.

If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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